

2011 Annual Drinking Water Quality Report

East Valley Water System

Is my water safe?

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

Do I need to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

Where does my water come from?

Douglas County purchases water from the Town of Minden. Listed are the wells where your water comes from in the Town of Minden. For additional information on the Town of Minden water, please contact the Town of Minden at (775) 782-5976 or go to the Town of Minden website at <http://www.townofminden.com>.

Source Name	Source Water Type
Well 1 Water St	Ground Water
CC Intertie From Gardnerville Ranch NV0066	Ground Water
Well 4 Ironwood Dr	Ground Water
Well 8 Buckeye Road	Ground Water
Well 2 County Rd	Ground Water
Well 3 County Rd	Ground Water
Well 5 Bougainvillea	Ground Water

Your water is treated to remove several contaminants and disinfectant is added to protect you against microbial contaminants. The Safe Drinking Water Act (SDWA) requires states to develop a Source Water Assessment (SWA) for each public water supply that treats and distributes raw source water in order to identify potential contamination sources. The state has completed an assessment of our source water. For results of the source water assessment, please contact the Town of Minden.

Why are there contaminants in my drinking water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791). The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity:

- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, mining, or farming;
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;
- Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems;
- Radioactive contaminants, which can be naturally occurring or be the result of mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

How can I get involved?

See our Water Conservation Plan on the Douglas County Water Utility Website at <http://www.douglascountynv.gov/index.aspx?nid=256>

Description of Water Treatment Process

Your water is treated by disinfection. Disinfection involves the addition of chlorine or other disinfectant to kill dangerous bacteria and microorganisms that may be in the water. Disinfection is considered to be one of the major public health advances of the 20th century.

Water Conservation Tips

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit www.epa.gov/watersense for more information.

Source Water Protection Tips

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community, or visit the Watershed Information Network's How to Start a Watershed Team.
- Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste - Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

Additional Information for Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. East Valley Water System is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Terms & Abbreviations

Maximum Contaminant Level Goal (MCLG): the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLG's allow for a margin of safety.

Maximum Contaminant Level (MCL): the "Maximum Allowed" MCL is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

Action Level (AL): the concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

Treatment Technique (TT): a treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Residual Disinfectant Level (MRDL): the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Non-Detects (ND): laboratory analysis indicates that the constituent is not present.

Parts per Million (ppm) or milligrams per liter (mg/l)

Parts per Billion (ppb) or micrograms per liter (µg/l)

Picocuries per Liter (pCi/L): picocuries per liter is a measure of the radioactivity in water.

Millirems per Year (mrem/yr): measure of radiation absorbed by the body.

Million Fibers per Liter (MFL): million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU): nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Water Quality Data

The tables following below list all of the drinking water contaminants, which were detected during the 2011 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1- December 31, 2011. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old. **The bottom line is that the water that is provided to you is safe.**

Testing Results for Town Of Minden

Microbiological	Result	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2011				

Lead and Copper	Date	90 TH Percentile	95 TH Percentile	Range	Unit	AL	Sites Over AL	Typical Source
COPPER	2008 - 2010	0.11		ppm	1.3	0		Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
LEAD	2008 - 2010	2		ppb	15	0		Corrosion of household plumbing systems; Erosion of natural deposits.

Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
ARSENIC	3/14/2011	12	7 - 12	ppb	10	0	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
BARIUM	8/15/2011	0.11	0.06 - 0.12	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
CHROMIUM	7/7/2009	2	2	ppb	100	100	Discharge from steel and pulp mills; Erosion of natural deposits.
FLUORIDE	8/1/2011	0.2	0.2	ppm	2	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
NICKEL	7/7/2009	0.002	0.002	mg/L	0.1	0.1	
NITRATE	8/15/2011	0.8	0.7 - 0.8	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
SELENIUM	7/7/2009	2	2	ppb	50	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines

Radionuclides	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
COMBINED URANIUM	5/13/2008	3	3	µg/L	30	0	Erosion of natural deposits
GROSS ALPHA, INCL. RADON & U	6/30/2009	4.9	4.9	pCi/L	15	0	Decay of natural and man-made deposits

Secondary Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
ALKALINITY, BICARBONATE	8/15/2011	161	134 - 161	MG/L			
ALKALINITY, TOTAL	8/15/2011	132	110 - 132	MG/L			
BORON, TOTAL	8/15/2011	0.2	0.1 - 0.2	MG/L			
CALCIUM	8/15/2011	37	31 - 37	MG/L			
CHLORIDE	8/1/2011	6	5 - 6	MG/L	400		
CONDUCTIVITY @ 25 C UMHOS/CM	8/15/2011	300	260 - 300	UMHO/CM			
HARDNESS, CALCIUM MAGNESIUM	6/14/2010	121	57 - 121	MG/L			
HARDNESS, TOTAL (AS CAC03)	8/15/2011	125	106 - 125	MG/L			
MAGNESIUM	8/15/2011	8	6 - 8	MG/L	150		
PH	8/1/2011	8.22	8.12 - 8.22	PH	8.5		
SILICA	8/1/2011	39	32 - 39	MG/L			
SODIUM	8/1/2011	20	16 - 20	MG/L	200	20	
SULFATE	8/1/2011	24	19 - 24	MG/L	500		
TDS	8/1/2011	189	168 - 189	MG/L	1000		

Testing Results for Douglas County Utilities

Microbiological	Result	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2011				

Disinfectants & By-Products	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
TTHMs [Total Trihalomethanes] (ppb)	2011	3	NA - 3	ppb	80	NA	By-product of drinking water disinfection

Lead and Copper	Date	90 TH Percentile	Unit	AL	Sites Over AL	Typical Source
COPPER	2010	0.24	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits;
LEAD	2010	7	ppb	15	1	Corrosion of household plumbing systems; Erosion of natural deposits

Health Information About Water Quality

Inorganic Contaminants

Lead. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Arsenic

Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer. EPA's

standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

We take five arsenic samples in the area around Well 8. On March 14, 2011, a single reading of 12 ppb was recorded. The average of the five tests resulted in a reading of 9.8 ppb, and Well 8 stays at or below 10 ppb under normal operating conditions. The Town of Minden is assessing Well No. 8 to determine if it can be modified to eliminate the highest arsenic producing zones.

Consumer Confidence Report: This Consumer Confidence Report will not be automatically mailed to customers, but is available for distribution upon request. Request can be made in writing to Douglas County Public Works, P.O. Box 218, Minden Nevada, 89423 or by calling 775-782-9989. This report is also posted on the Douglas County Water Utility Website <http://www.douglascountynv.gov/index.aspx?nid=256>

For more information please contact:

Douglas County Water Utility
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